

A new species of *Neojulodis* (*Neojulodis*) Kerremans (Coleoptera: Buprestidae)

by

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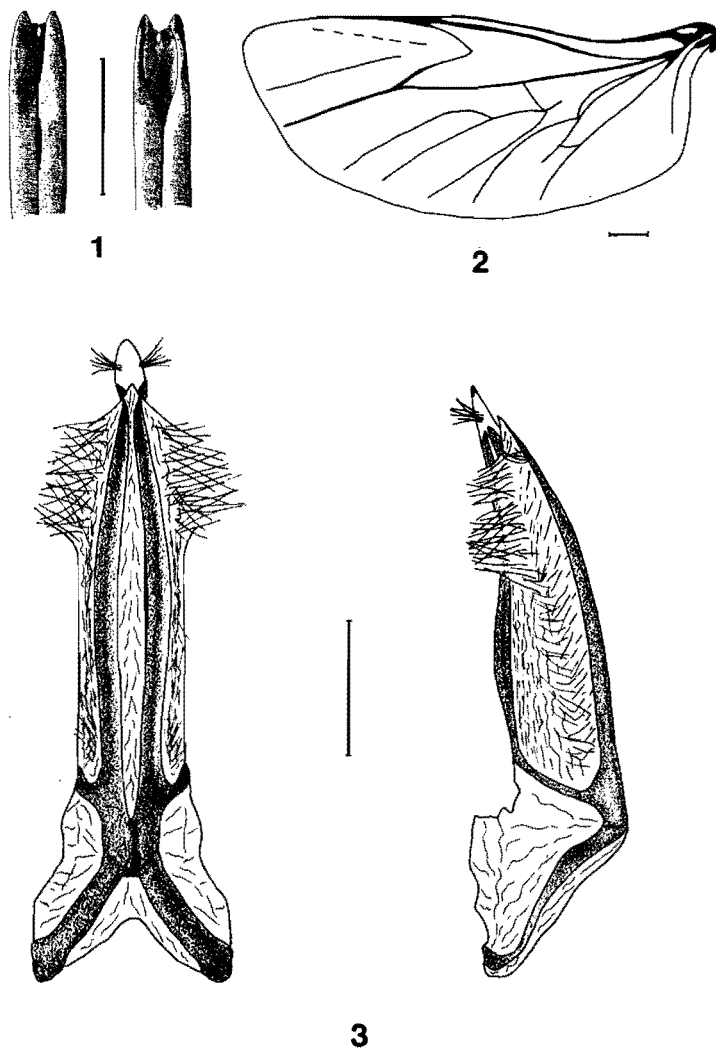
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A new species, *Neojulodis* (*N.*) *purpurescens* **spec. nov.**, from Namaqualand is described and illustrated. The species represents the most conservative form in this subgenus, with affinities to *Julodis* Eschscholtz and *Julodella* Semenow.

INTRODUCTION

The genera of the subfamily Julodinae were revised by Holm (1979a), and the genus *Neojulodis* Kerremans by Holm (1979b). Subsequently, one new *Neojulodis* (*Protojulodis*) species was described (Holm 1986). The new species of *Neojulodis* (*Neojulodis*) described here is the first new member of this subgenus discovered in this century. It is an interesting species in that it seems to have a very restricted distribution in Namaqualand, while all other known species of this subgenus have rather wide Cape distributions. It also seems to be the most conservative species in the subgenus. While the general appearance and genitalia are closest to *N. (N.) papillosa* Thunberg, it also shows definitive affinities with the sister-genera *Julodis* Eschscholtz and *Julodella* Semenow. The orange subhumeral setal brush in some specimens recurs in *Julodis humeralis* and related species; the metacoxa is only weakly setose medially in *N. (N.) purpurescens*; and the widely spaced apophyses and slender ventral plates of the ovipositor are also closest to some *Julodis* and *Julodella* species. The strongly developed wing venation (Fig.2) also indicates the plesiomorphic state of *N. (N.) purpurescens* within the subgenus. Otherwise, however, this species agrees well with the key characters of *Neojulodis* s.str. Holm (1979a,b), excepting the setal tuft on the metacoxa, which is less clearly expressed and sometimes hardly discernible in *N. (N.) purpurescens*. The key to *Neojulodis* (*Neojulodis*) species (Holm 1979b) needs to be emended as follows to accommodate the new species:

- 11 (14) Elytral colour uniform(12a)
- 12a(12b) Elytra light green to brownish green, without metallic sheen; mid-metacoxal setal brush well developed(12)
- 12b(12a) Elytra black to dark brown, with purple metallic sheen; mid-metacoxal setal brush hardly discernible *purpurescens spec. nov.*
- 12 (13)



Figs 1-3. Details of *Neojulodis (N.) purpurescens* **spec. nov.**; (scale bars: 1mm); Fig 1. apex of aedeagus, left dorsal, right ventral view; Fig 2. wing venation; Fig 3. ovipositor, left ventral, right left lateral view.



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Fig. 4. Dorsal aspect of *Neojulodis* (*N.*) *purpurescens* **spec. nov.** (scale bar: 1mm)

***Neojulodis (Neojulodis) purpurescens* spec. nov. (Figs. 1-4)**

LENGTH: 12,3 – 18,5 mm

WIDTH: 6,0 – 7,5 mm

Head: Black but with bronze sheen on epistome and sometimes also between eyes; about half as wide as pronotal width, not completely covered by pronotum from above. Frons variable from convex to rather flat. Punctures dense but longitudinally elongate on upper half. Median carina always clearly visible, at least in upper half. Eyes about three fifths as long as width between them. Supra-antennal ridges elevated, reaching nearly onto the rim of epistome. Epistome deeply incised with broad lateral lobes protruding forward and with a small pointed median lobe in incision (Fig.4). Pubescence long, thin, white and sparse but denser between the eyes.

Pronotum (Fig.4): Black, with disc and sides moderately rounded. Base broadly and triangularly retracted into scutellar area, this triangular lobe with pointed apex slightly elevated and separated from disc by a rather irregular, shallow depression. Median groove reduced to a more or less depressed lane of small punctures of higher density. Punctures on disc variable in size, unevenly and sparsely scattered; around the disc large, most pronouncedly so above lateral pronotal margin where they leave bulgingly raised, broad intersticiary areas. Pubescence long, thin, erect, white, rather sparse, more or less evenly spaced but of higher density in apical part of lateral pronotal margin.

Elytra (Fig.4): Colour variable from predominantly black to dark brown, with raised parts of costae shining bronze. Elytra covered with variable and irregular punctures but in anterior/basal three-fifths of length mostly larger and denser than on pronotal disc, in apical two-fifths of length smaller and less dense. Sutural costa, first and second costa broadly and roundedly raised in scutellar area, with each a patch of dense, tomentose white pubescence between them. Sutural costa and first costa discernible over whole length of elytron, second costa only discernible and raised in basal two-thirds of length. Intercoxae about twice as wide as costae. Isolated spots of white, rather short and tomentose pubescence all over elytra, with additional long, thin sparse setae especially in the scutellar area and extending along suture more or less far into apical part of elytra. Suture closed, apical spinae well developed. Marginal ridge complete and evenly punctured, metacoxal tooth strongly developed. Humeral calli poorly developed but marginal ridge strongly protruding below humeri. Patch of dense, tomentose orange pubescence between humeri and protruding marginal ridge.

Underside: Black with metallic bronze sheen. Punctures dense and regular except on shining rear margins of the abdominal sternites. Pubescence long, white, dense, but reduced on metasternum, inner quarter of metacoxa, rear margins and middle parts of sternites except apical sternite. Prosternal rim with a complete ridge, incised in middle. Prosternal process rather narrow. Meso-metasternal suture interrupted by sternal cavity. Longitudinal sulcus often hardly discernible, transverse sulci well developed at least near sides. Middle of metacoxa usually with a slightly denser tuft of pubescence. Abdominal sternites mildly concave, straight along their bulging rear margins.

Appendages (Fig.4): Antennae much longer than width of head (3:2), last and penultimate segments equal. Colour of tibiae slightly lighter than on body, shining purple-bronze.

Genitalia: As in Figs 1 and 3.

Notes: The ovipositor (Fig.3) is most similar to *Neojulodis* (*N.*) *papillosa* and *N.* (*N.*) *tomentosa gnapholon* – all three having fairly long and thin sclerotized ventral plates and two fairly thin and well spaced apophyses at base. All three taxa come closest to the more primitive plesiomorphic *Julodella*-type ovipositor, with *N.* (*N.*) *purpurescens* being closest. However, *N.* (*N.*) *purpurescens* can be distinguished from the other two species by having the thinnest sclerotized ventral plates. The aedeagus (Fig.1) closely resembles that of *N.* (*N.*) *papillosa*. The species is best distinguished from all other *Neojulodis* (*N.*) species by its coloration (Fig.4) and the reduction of the mid-metacoxal setal brush (this brush is in fact only discernible in about half of the specimens of *N.* (*N.*) *purpurescens*).

MATERIAL EXAMINED: Holotype, 3 Paratypes: CAPE PROVINCE: Garies, SE 30 17 Db., 1.IX.1989 – C.R. Owen (Transvaal Museum, Pretoria). 8 Paratypes: ditto (National Collection of Insects, Pretoria; South African Museum, Cape Town; State Museum, Windhoek; British Museum (Natural History), London; Museum für Naturkunde der Humboldt Universität, Berlin; Naturhistorisches Museum, Basel; Zoologische Staatssammlung, München; Museum National D'Histoire Naturelle, Paris). 3 Paratypes: ditto (C.L. Bellamy collection). 4 Paratypes: ditto (C.R. Owen collection). 1 Paratype: CAPE PROVINCE: Farm Maxwell, 20 km SSW Springbok, SE 29 17 Dd, 18.IX.1985 – C.L. Bellamy & S. Louw (Nasionale Museum, Bloemfontein). 3 Paratypes: CAPE PROVINCE: Groenrivier, SE 30 17 Db, VIII.1989 – C.R. Owen (Transvaal Museum, Pretoria).

ACKNOWLEDGMENTS

We wish to thank Mr. Collin Owen, who kindly made his material of this interesting new species available. One of us, E.H., acknowledges grants from the University of Pretoria and the CSIR.

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Accepted 13 October 1990